



# Guideline

Title	Leverage Requirements - Guideline (2023)
Category	Capital Adequacy Requirements
Date	January 31, 2022
Sector	Banks Trust and Loan Companies
Effective Date	February 2023/ April 2023

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## Note



Effective date for institutions with fiscal year ending October 31 or December 31, respectively.

Subsections 485(1) and 949(1) of the *Bank Act* (BA) and subsection 473(1) of the *Trust and Loan Companies Act* (TLCA) require banks, bank holding companies, and trust and loan companies, respectively, to maintain adequate capital. The Leverage Requirements Guideline is not made pursuant to subsections 485(2) or 949(2) of the BA, to subsection 473(2) of the TLCA. However, the leverage requirements set out in this guideline, together with the capital standards specified in the Capital Adequacy Requirements (CAR) Guideline, provide the framework within which the Superintendent assesses whether a bank or a trust or loan company maintains adequate capital pursuant to the Acts. For this purpose, the Superintendent has established two minimum standards: the leverage ratio described in this Guideline, and the risk-based capital ratio set out in the CAR Guideline. [1](#) The first test provides an overall measure of the adequacy of an institution's capital. The second measure focuses on risk faced by the institution. Notwithstanding that a bank, bank holding company, or a trust and loan company may meet these standards, the Superintendent may direct a bank or bank holding company to increase its capital under subsections 485(3) or 949(3) of the BA, or a trust and loan company to increase its capital under subsection 473(3) of the TLCA.

OSFI, as a member of the Basel Committee on Banking Supervision, participated in the development of the international leverage ratio framework included in the *Basel Framework* (December 2019).

## I. Overview

1. Outlined below are the leverage requirements for banks (including federal credit unions), bank holding companies, federally regulated trust companies and federally regulated loan companies, collectively referred to as 'institutions'.
2. Parts of this guideline are drawn from the Basel Committee on Banking Supervision (BCBS) Basel Framework published on the BIS website [2](#) effective December 15, 2019. For reference, the Basel paragraph numbers that are associated with the text appearing in this guideline are indicated in square brackets at the end of each paragraph [3](#) .

## II. Scope of Application

3. These leverage requirements apply on a consolidated basis and apply to all institutions as defined in paragraph 1 above. [4](#) The consolidated entity includes all subsidiaries except insurance subsidiaries. This is consistent with the scope of regulatory consolidation used under the risk-based capital framework as set out in Section 1.1 of OSFI's Capital Adequacy Requirements (CAR) Guideline. Small and medium-sized deposit-taking institutions (SMSBs) which fall into Category III as defined in OSFI's SMSB Capital and Liquidity Requirements Guideline are not subject to this guideline. [5](#) [Basel Framework, LEV 10.1]
4. *Treatment of investments in the capital of banking, financial, insurance and commercial entities that are outside the regulatory scope of consolidation:* where a banking, financial, insurance or commercial entity is outside the scope of regulatory consolidation, only the investment in the capital of such entities (i.e., only the carrying value of the investment, as opposed to the underlying assets and other exposures of the investee) is to be included in the leverage ratio exposure measure. However, investments in the capital of such entities that are deducted from Tier 1 capital as set out in paragraph 25 may be excluded from the leverage ratio exposure measure. [Basel Framework, LEV 10.2]

## III. Calculation of leverage requirements

5. The leverage ratio is defined as the capital measure (the numerator) divided by the exposure measure (the denominator), with this ratio expressed as a percentage:

$$\text{Leverage ratio} = \frac{\text{Capital Measure}}{\text{Exposure Measure}}$$

[Basel Framework, LEV 20.3]

6. Both the capital measure and exposure measure are to be calculated on a quarter-end basis.

[Basel Framework, LEV 20.6]

## IV. Minimum and authorized leverage requirements

7. Institutions are expected to maintain a leverage ratio that meets or exceeds 3% at all times.

[Basel Framework, LEV 20.7]

8. The Superintendent also prescribes authorized leverage ratio requirements for individual institutions.

Authorized leverage ratios are communicated to individual institutions on a bilateral basis. The authorized leverage ratio is considered supervisory information and is not permitted to be disclosed under the *Supervisory Information Regulations* [6](#) .

9. When setting authorized leverage ratios and when assessing whether an increase or a decrease in the institution's authorized leverage ratio is appropriate, OSFI will take into account the following factors:

- the potential impact of the change in the leverage ratio on the institution's risk-based capital ratios compared to internal targets and OSFI targets;
- the effectiveness of operational management and oversight functions;
- the adequacy of capital and liquidity management processes and procedures;
- the intervention history [7](#) of the institution;
- the institution's risk profile and business lines (including diversification of exposures); and
- the institution's strategic and business plans.

10. Requests for decreases in authorized leverage ratios should be addressed to the Regulatory Affairs Division [8](#) , with a copy to the Lead Supervisor, and should also include a business case that, at a minimum, sets out:

- the reason why a decrease is requested;
- financial projections, including growth by business line; and
- the expected impact of the projected growth on profitability, liquidity, and risk-based capital ratios.

11. As part of its intervention strategy for institutions, OSFI may increase the institution's authorized leverage ratio and, if so, may require the institution to file with OSFI an action plan for achieving the higher authorized level.

12. In addition, to maintain the relative roles of the risk-based capital and leverage ratio requirements, Canadian banks designated as domestic systemically important banks (D-SIBs) by OSFI, as specified in Chapter 1 of the CAR Guideline, must also meet a leverage ratio buffer requirement. Consistent with the capital measure required to meet the leverage ratio minimum described in paragraph 17, D-SIBs must meet the leverage ratio buffer with Tier 1 capital. The leverage ratio buffer required of D-SIBs is in addition to the 3.0% leverage ratio minimum, and the authorized leverage ratio requirements prescribed by the Superintendent for individual institutions [Basel Framework, LEV 40.1]
13. The leverage ratio buffer will be set at 50% of a D-SIB's higher-loss absorbency risk-weighted requirements. For example, a D-SIB subject to a 1% higher-loss absorbency requirement would be subject to a 0.5% leverage ratio buffer requirement. This means that DSIBs are expected to maintain a leverage ratio that meets or exceeds 3.5% at all times. [Basel Framework, LEV 40.2]
14. The design of the leverage ratio buffer is akin to the capital buffers in the risk-weighted framework. As such, the leverage ratio buffer will include minimum capital conservation ratios divided into five ranges. Capital distribution constraints will be imposed on a D-SIB which does not meet its leverage ratio buffer requirement. [Basel Framework, LEV 40.3]
15. The capital distribution constraints imposed on D-SIBs will depend on the D-SIB's CET1 risk-weighted ratio and its leverage ratio. A D-SIB which meets both its Common Equity Tier 1 (CET1) risk-weighted requirements (defined as a 4.5% minimum requirement, a 2.5% capital conservation buffer, the 1% D-SIB surcharge and countercyclical capital buffer, if applicable) and its Tier 1 leverage ratio requirement (defined as a 3% leverage ratio minimum requirement and the D-SIB leverage ratio buffer) will not be subject to minimum capital conservation standards. A D-SIB which does not meet one of these requirements will be subject to the associated minimum capital conservation standards. A D-SIB which does not meet both requirements will be subject to the higher minimum capital conservation standard related to its risk-based capital requirement or leverage ratio requirement. [Basel Framework, LEV 40.4]

16. The table below shows the minimum capital conservation standards for the CET1 risk-based requirements and Tier 1 leverage ratio requirements of a D-SIB in the first bucket of the higher loss-absorbency requirements (i.e., where a 1% risk-based DSIB capital surcharge applies).

**Table 1: Minimum capital conservation standards for DSIBs in the first higher loss-absorbency requirement bucket**

CET1 risk-based ratio	Tier 1 leverage ratio	Minimum capital conservation ratios (expressed as a percentage of earnings)
4.5%–5.375%	3%–3.125%	100%
> 5.375%–6.25%	> 3.125%–3.25%	80%
> 6.25%–7.125%	> 3.25%–3.375%	60%
> 7.125%–8.0%	> 3.375%–3.50%	40%
> 8.0%	> 3.50%	0%

[Basel Framework, LEV 40.5]

## V. Capital Measure

17. The capital measure used for the leverage ratio is the Tier 1 capital of the institution – comprising Common Equity Tier 1 capital and Additional Tier 1 instruments – as defined in Chapter 2 of the CAR Guideline. Therefore, the capital measure used for the leverage ratio at any particular point in time is the Tier 1 capital measure applying at that time under the risk-based capital framework. [Basel Framework, LEV 20.4]

## VI. Exposure Measure

18. The exposure measure for the leverage ratio should generally follow gross accounting values. Institutions should apply the adjustments contained in this guideline to the gross accounting values to arrive at the leverage exposure amount. [Basel Framework, LEV 30.1]

19. Unless specified differently in this guideline, institutions must not take account of physical or financial collateral, guarantees or other credit risk mitigation techniques to reduce the exposure measure. In addition, netting of loans and deposits is not allowed. [Basel Framework, LEV 30.2]

20. An institution's total exposure measure is the sum of the following exposures:

1. on-balance sheet exposures (section VI(a));
2. derivative exposures (section VI(b));
3. securities financing transaction (SFT) exposures (section VI(c)); and
4. off-balance sheet (OBS) items (section VI(d)).

[Basel Framework, LEV 20.5]

21. Institutions should be particularly vigilant to transactions and structures that have the result of inadequately capturing institutions' sources of leverage. Examples of these transactions and structures may include:

- SFTs where exposure to the counterparty increases as the counterparty's credit quality decreases or SFTs in which the credit quality of the counterparty is positively correlated with the value of the securities received in the transaction (i.e., the credit quality of the counterparty falls when the value of the securities falls);
- Institutions that normally act as principal but adopt an agency model to transact in derivatives and SFTs in order to benefit from the more favourable treatment permitted for agency transactions under the leverage ratio framework;
- Collateral swap trades structured to mitigate inclusion in the leverage ratio exposure measure; or
- Use of structures to move assets off the balance sheet.

[Basel Framework, LEV 30.6]

22. The above list of examples is by no means exhaustive. OSFI will consider a range of actions to address such transactions that are not adequately captured in the leverage ratio exposure measure or that may lead to a potentially destabilising deleveraging process. Supervisory actions may include requiring enhancements in institutions' management of leverage, imposing operational requirements (e.g., additional reporting to OSFI)

and/or requiring that the relevant exposure is adequately capitalised through a Pillar 2 capital charge. These examples of supervisory actions are merely indicative and by no means exhaustive. [Basel Framework, LEV 30.6]

23. To facilitate the implementation of monetary policies, OSFI may temporarily exempt central bank reserves from the leverage ratio exposure measure in exceptional macroeconomic circumstances. To maintain the same level of resilience provided by the leverage ratio, when this exemption is applied, OSFI will also increase the calibration of the minimum leverage ratio requirement commensurately to offset the impact of exempting central bank reserves. In addition, in order to maintain the comparability and transparency of the Basel III leverage ratio framework, institutions will be required to disclose the impact of any temporary exemption alongside ongoing public disclosure of the leverage ratio without application of such exemption. [Basel Framework, LEV 30.7]

#### (a) On balance sheet exposures

24. Institutions must include all balance sheet assets in their exposure measure, including on-balance sheet derivatives collateral and collateral for SFTs, with the exception of on-balance sheet derivative and SFT assets that are covered in paragraphs 37 to 60 below. [Basel Framework, LEV 30.8]
25. However, to ensure consistency, balance sheet assets deducted from Common Equity Tier 1 (CET1) capital or Additional Tier 1 capital (as set out in section 2.3 of the CAR Guideline) may be deducted from the exposure measure. Three examples follow:
- Where a banking, financial or insurance entity is not included in the regulatory scope of consolidation as set out in paragraph 4 of this guideline, the amount of any investment in the capital of that entity that is totally or partially deducted from CET1 capital or Additional Tier 1 capital of the institution following the corresponding deduction approach in paragraphs 84 to 90 of Chapter 2 of the CAR Guideline must also be deducted from the exposure measure.
  - For institutions using the internal ratings-based (IRB) approach to determining capital requirements for credit risk, paragraph 63 of Chapter 2 of the CAR Guideline requires any shortfall in the stock of eligible



provisions relative to expected losses to be deducted from CET1 capital. The same amount must be deducted from the exposure measure.

- Prudent valuation adjustments (PVAs) for exposures to less liquid positions, other than those related to liabilities, that are deducted from CET1 capital as per section 9.4 in Chapter 9 (Market Risk) of the CAR Guideline may be deducted from the leverage ratio exposure measure.

[Basel Framework, LEV 30.3]

26. Liability items must not be deducted from the measure of exposure. For example, gains/losses on fair valued liabilities or accounting valuation adjustments on derivative liabilities due to changes in the institution's own credit risk as described in section 2.3 of Chapter 2 of the CAR Guideline must not be deducted from the exposure measure. [Basel Framework, LEV 30.4]

27. On-balance sheet, non-derivative assets are included in the exposure measure net of specific provisions or accounting valuation adjustments (e.g. accounting credit valuation adjustments). In addition, general provisions as defined in section 2.1.3.7 of Chapter 2 in the CAR Guideline which have reduced Tier 1 capital may be deducted from the leverage ratio exposure measure. [9](#) [Basel Framework, LEV 30.9]

28. The accounting for regular-way purchases or sales [10](#) of financial assets that have not been settled (hereafter "unsettled trades") differs across and within accounting frameworks, with the result that those unsettled trades can be accounted for either on the trade date (trade date accounting) or on the settlement date (settlement date accounting). For the purpose of the leverage ratio exposure measure, institutions using trade date accounting must reverse out any offsetting between cash receivables for unsettled sales and cash payables for unsettled purchases of financial assets that may be recognised under the applicable accounting framework, but may offset between those cash receivables and cash payables (regardless of whether such offsetting is recognised under the applicable accounting framework) if the following conditions are met:

- The financial assets bought and sold that are associated with cash payables and receivables are fair valued through income and included in the institution's regulatory trading book as specified in section 9.2 in Chapter 9 of the CAR Guideline; and

- The transactions of the financial assets are settled on a delivery-versus-payment (DVP) basis.

[Basel Framework, LEV 30.10]

29. Institutions using settlement date accounting will be subject to the treatment set out in paragraphs 61 to 75.

[Basel Framework, LEV 30.11]

30. Cash pooling refers to arrangements involving treasury products whereby an institution combines the credit and/or debit balances of several individual participating customer accounts into a single account balance to facilitate cash and/or liquidity management. [Basel Framework, LEV 30.12]

31. For purposes of the leverage ratio exposure measure, where a cash pooling arrangement entails a transfer at least on a daily basis of the credit and/or debit balances of the individual participating customer accounts into a single account balance, the individual participating customer accounts are deemed to be extinguished and transformed into a single account balance upon the transfer provided the institution is not liable for the balances on an individual basis upon the transfer. Thus, the basis of the leverage ratio exposure measure for such a cash pooling arrangement is the single account balance and not the individual participating customer accounts. [Basel Framework, LEV 30.12]

32. When the transfer of credit and/or debit balances of the individual participating customer accounts does not occur daily, for purposes of the leverage ratio exposure measure, extinguishment and transformation into a single account balance is deemed to occur and this single account balance may serve as the basis of the leverage ratio exposure measure provided all of the following conditions are met:

- In addition to providing for the several individual participating customer accounts, the cash pooling arrangement provides for a single account, into which the balances of all individual participating customer accounts can be transferred and thus extinguished;
- The institution (i) has a legally enforceable right to transfer the balances of the individual participating customer accounts into a single account so that the institution is not liable for the balances on an individual basis and (ii) at any point in time, the institution must have the discretion and be in a position to exercise this right;

- OSFI does not deem as inadequate the frequency by which the balances of individual participating customer accounts are transferred to a single account;
- There are no maturity mismatches among the balances of the individual participating customer accounts included in the cash pooling arrangement or all balances are either overnight or on demand; and
- The institution charges or pays interest and/or fees based on the combined balance of the individual participating customer accounts included in the cash pooling arrangement.

[Basel Framework, LEV 30.12]

33. In the event the above mentioned conditions are not met, the individual balances of the participating customer accounts must be reflected separately in the leverage ratio exposure measure. [Basel Framework, LEV 30.12]

34. With regard to traditional securitizations, an originating institution may exclude securitized exposures from its leverage ratio exposure measure if the securitization meets the operational requirements for the recognition of risk transference as set out in paragraph 29 of Chapter 6 of the CAR Guideline. Institutions meeting these conditions must include any retained securitization exposures in their leverage ratio exposure measure. In all other cases (e.g., traditional securitizations that do not meet the operational requirements for the recognition of risk transference or synthetic securitisations), the securitized exposures must be included in the leverage ratio exposure measure unless otherwise instructed by OSFI.

[Basel Framework, LEV 30.5]

35. In the case of mortgage whole loan sale transactions having the following characteristics, the balance sheet exposure will be considered to be substantially reduced and the institution will not be required to include sold loans in the exposure measure.

1. The mortgages are insured by CMHC or a private insurer recognized by the *Protection of Residential Mortgage or Hypothecary Insurance Act*;

2. The institution has retained the option, not the obligation to repurchase the mortgages at par from the investor at the end of their contractual term;
  3. The institution may continue to administer and service mortgages for the investor following the sale but the institution is not obligated to advance uncollected mortgage payments on account of delinquent or defaulted mortgages; and
  4. The investor has the right to sell the mortgages to a third party at any time.
36. Mortgages insured as per paragraph 35(a) above for their whole life, that have been pooled and sold as *National Housing Act Mortgage Backed Securities* (NHA MBS or NHA MBS Program) and derecognized under IFRS following a transaction with a third party with respect to the institution's retained interest in any excess spread, can be excluded from the exposure measure. Such exclusion is subject to the institution obtaining written confirmation from CMHC that CMHC does not object to the institution proceeding with such a transaction or similar transactions. However, recognizing the potential liquidity constraints imposed by the NHA MBS Program on institutions in a stressed environment, institutions must be able to demonstrate alignment with OSFI's B-6 *Liquidity Principles* Guideline, *Liquidity Adequacy Requirements* Guideline, and other liquidity requirements as necessary and/or specified by OSFI. This includes institutions having in place appropriate liquidity plans that demonstrate the management of liquidity risks, including an appropriate laddering of the scheduled maturities for all outstanding NHA MBS and on-going tracking of cash flows against those plans.

## (b) Derivative exposures

### (i) Treatment of derivatives

37. Institutions must calculate their derivative exposures, including where an institution sells protection using a credit derivative, as a scalar multiplier alpha set at 1.4, multiplied by the sum of the replacement cost (RC) [11](#) for the current exposure and an add-on for potential future exposure (PFE), as described in section 7.1.7 of the CAR Guideline. The treatment for trades where specific wrong-way risk (SWWR) has been identified under paragraph 169 of Chapter 7 of the CAR Guideline does not apply for purposes of calculating derivative exposures in this guideline. Instead, the exposure for these trades should be calculated as if SWWR was not



present according to section 7.1.7 of the CAR Guideline. Written credit derivatives are subject to an additional treatment, as set out in paragraphs 42 to 49 below. [Basel Framework, LEV 30.14]

38. In addition to the treatment in paragraph 37, in the case of cash margin *provided* to a counterparty, the posting institution may deduct the resulting receivable from its leverage ratio exposure measure, where the cash margin has been recognized as an asset under the institution's operative accounting framework (e.g., IFRS).

[Basel Framework, LEV 30.25]

## (ii) Treatment of clearing services

39. Where an institution acting as clearing member (CM) [12](#) offers clearing services to clients, the CM's trade exposures to the central counterparty (CCP) that arise when the CM is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CCP defaults, must be captured by applying the same treatment that applies to any other type of derivatives transactions. However, if the CM, based on the contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered in the event that a QCCP defaults, the CM need not recognize the resulting trade exposures to the QCCP in the leverage ratio exposure measure [13](#) . In addition, where a institution provides clearing services as a "higher level client" within a multi-level client structure [14](#) , the institution need not recognize in its leverage ratio exposure measure the resulting trade exposure to the CM or to an entity that serves as a higher level client to the institution in the leverage ratio exposure measure if it meets all of the following conditions:

1. The offsetting transactions are identified by the QCCP as higher level client transactions and collateral to support them is held by the QCCP and/or the CM, as applicable, under arrangements that prevent any losses to the higher level client due to: (i) the default or insolvency of the CM; (ii) the default or insolvency of the CM's other clients, and (iii) the joint default of insolvency of the CM and any of its other clients; [15](#)

2. The institution must have conducted sufficient legal review (and undertaken such further review as necessary to ensure continuing enforceability) and have a well-founded basis to conclude that, in the event of legal challenge, the relevant courts and administrative authorities would find that such arrangement mentioned above would be legal, valid, binding and enforceable under relevant laws of the relevant jurisdiction(s);
3. Relevant laws, regulations, rules, contractual or administrative arrangements provide that the offsetting transactions with the defaulted or insolvent CM are highly likely to continue to be indirectly transacted through the QCCP, or by the QCCP, if the CM defaults or becomes insolvent [16](#) . In such circumstances, the higher level client positions and collateral with the QCCP will be transferred at market value unless the higher level client requests to close out the position at market value; and
4. The institution is not obligated to reimburse its client for any losses suffered in the event of default of either the CM or the QCCP.

[Basel Framework, LEV 30.26]

40. Where a client enters directly into a derivatives transaction with the CCP and the CM guarantees the performance of its client's derivative trade exposures to the CCP, the institution acting as the CM for the client to the CCP must *calculate* its related leverage ratio exposure resulting from the guarantee as a derivative exposure as set out in paragraphs 37 to 49 of this guideline, as if the institution had entered directly into the transaction with the client, including with regard to receipt or provision of cash variation margin. [Basel Framework, LEV 30.28]

41. For the purpose of paragraph 39 and 40, an affiliate entity to the institution acting as a CM may be considered a client if it is outside the relevant scope of regulatory consolidation at the level at which the leverage ratio is applied as specified in paragraph 4. In contrast, if an affiliate entity falls within the regulatory scope of consolidation, the trade between the affiliate entity and the CM is eliminated in the course of consolidation, but the CM still has a trade exposure to the CCP. In this case, the transaction will be considered *proprietary* and the exemption in paragraph 39 no longer applies. [Basel Framework, LEV 30.29]

### (iii) Additional treatment of written credit derivatives

42. In addition to the counterparty credit risk (CCR) exposure arising from the fair value of the contracts, written credit derivatives create a notional credit exposure arising from the creditworthiness of the reference entity. Therefore written credit derivatives will be treated consistently with cash instruments (e.g., loans, bonds) for the purposes of the exposure measure. [Basel Framework, LEV 30.30]
43. In order to capture the credit exposure to the underlying reference entity, in addition to the above CCR treatment for derivatives, the effective notional amount referenced by a written credit derivative is to be included in the exposure measure, unless the written credit derivative is included in a transaction cleared on the behalf of a client of the institution acting as a CM (or acting as a clearing services provider in a multi-level client structure as referenced in paragraph 39) and the transaction meets the requirements of paragraph 39 for the exclusion of trade exposures to the QCCP (or, in the case of a multi-level client structure, the requirements of paragraph 39 for the exclusion of trade exposures to the CM or the QCCP). [Basel Framework, LEV 30.31]
44. The effective notional amount of a written credit derivative may be reduced by any negative change in fair value amount that has been incorporated into the calculation of Tier 1 capital with respect to the written credit derivative. [Basel Framework, LEV 30.31]
45. The resulting amount may be further reduced by the effective notional amount of a purchased credit derivative on the same reference name provided:
1. the credit protection purchased through credit derivatives is otherwise subject to the same or more conservative material terms as those in the corresponding written credit derivative. This ensures that if an institution provides written protection via some type of credit derivative, the institution may only recognise offsetting from another purchased credit derivative to the extent that the purchased protection is certain to deliver a payment in all potential future states. Material terms include the level of subordination, optionality, credit events, reference and any other characteristics relevant to the valuation of the derivative; [17](#)

2. the remaining maturity of the credit protection purchased is equal to or greater than the remaining maturity of the written credit derivative;
3. The credit protection purchased through credit derivatives is not purchased from a counterparty whose credit quality is highly correlated with the value of the reference obligation in the sense specified in paragraph 65 of Chapter 7 of the CAR Guideline. [18](#) ;
4. In the event that the effective notional amount of a written credit derivative is reduced by any negative change in fair value reflected in the institution's Tier 1 capital, the effective notional amount of the offsetting credit protection purchased through credit derivatives must also be reduced by any resulting positive change in fair value reflected in Tier 1 capital; and
5. The credit protection purchased through credit derivatives is not included in a transaction that has been cleared on behalf of a client (or that has been cleared by the institution in its role as a clearing services provider in a multi-level client services structure as referenced in paragraph 39) and for which the effective notional amount referenced by the corresponding written credit derivative is excluded from the leverage ratio exposure measure according to this paragraph.

[Basel Framework, LEV 30.31]

46. For the purposes of paragraph 43, the term "written credit derivative" refers to a broad range of credit derivatives through which an institution effectively provides credit protection and is not limited solely to credit default swaps and total return swaps. For example, all options where the institution has the obligation to provide credit protection under certain conditions qualify as "written credit derivatives". The effective notional amount of such options sold by the institution may be offset by the effective notional amount of options by which the institution has the right to purchase credit protection which fulfils the conditions of paragraph 45. For example, the condition of same or more conservative material terms as those in the corresponding written credit derivatives as referenced in paragraph 45 can be considered met only when the strike price of the underlying purchased credit protection is equal to or lower than the strike price of the underlying sold credit protection. [Basel Framework, LEV 30.32]



47. For purposes of paragraph 43, two reference names are considered identical only if they refer to the same legal entity. Credit protection on a pool of reference names purchased through credit derivatives may offset credit protection sold on individual reference names if the credit protection purchased is economically equivalent to purchasing credit protection separately on each of the individual names in the pool (this would, for example, be the case if a institution were to purchase credit protection on an entire securitisation structure). If a institution purchases credit protection on a pool of reference names through credit derivatives, but the credit protection purchased does not cover the entire pool (i.e., the protection covers only a subset of the pool, as in the case of an nth-to-default credit derivative or a securitisation tranche), then the written credit derivatives on the individual reference names may not be offset. However, such purchased credit protection may offset written credit derivatives on a pool provided that the credit protection purchased through credit derivatives covers the entirety of the subset of the pool on which the credit protection has been sold. [Basel Framework, LEV 30.33]
48. Where a bank purchases credit protection through a total return swap (TRS) and records the net payments received as net income, but does not record offsetting deterioration in the value of the written credit derivative (either through reductions in fair value or by an addition to reserves) in Tier 1 capital, the credit protection will not be recognised for the purpose of offsetting the effective notional amounts related to written credit derivatives. [Basel Framework, LEV 30.34]
49. Since written credit derivatives are included in the exposure measure at their effective notional amounts, and are also subject to add-on amounts for PFE, the exposure measure for written credit derivatives may be overstated. Institutions may therefore choose to exclude from the netting set for the PFE calculation the portion of the written credit derivative which is not offset according to paragraph 43 and whose effective notional amount is included in the exposure measure. Where effective bilateral netting contracts are not in place, the PFE add-on may be set to zero in order to avoid the double-counting described in this paragraph. [Basel Framework, LEV 30.35]
50. The effective notional of a written credit derivative may also be reduced by any cash independent amount pledged by a counterparty to offset the risk of the written credit derivative.

## (c) Securities financing transaction (SFT) exposures

51. SFTs are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements. [Basel Framework, LEV 30.36]
52. SFTs are included in the exposure measure according to the treatment described below. The treatment recognises that secured lending and borrowing in the form of SFTs is an important source of leverage, and ensures consistent international implementation by providing a common measure for dealing with the main differences in the operative accounting frameworks. [Basel Framework, LEV 30.36]

### (i) General treatment (institution acting as a principal)

53. Where an institution acts as a principal, the sum of the amounts in subparagraphs (i) and (ii) below are to be included in the leverage ratio exposure measure:

1. Gross SFT assets [19](#) recognised for accounting purposes (i.e., with no recognition of accounting netting), [20](#) adjusted as follows:
  - excluding from the exposure measure the value of any securities received under an SFT, where the institution has recognised the securities as an asset on its balance sheet; and
  - cash payables and cash receivables in SFTs with the same counterparty may be measured net if all the following criteria are met:
    1. Transactions have the same explicit final settlement date. In particular, transactions with no explicit end date but which can be unwound at any time by any party to the transaction are not eligible; [21](#)
    2. The right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both currently in the normal course of business and in the event of the counterparty's default, insolvency or bankruptcy; and
    3. The counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net

settlement, that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, both transactions must be settled through the same settlement mechanism and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and any issues arising from the securities legs of the SFTs do not interfere with the completion of the net settlement of the cash receivables and payables. In particular, this latter condition means that the failure of any single securities transaction in the settlement mechanism may delay settlement of only the matching cash leg or create an obligation to the settlement mechanism, supported by an associated credit facility. If there is a failure of the securities leg of a transaction in such a mechanism at the end of the window for settlement in the settlement mechanism, then this transaction and its matching cash leg must be split out from the netting set and treated gross [22](#) .

2. A measure of CCR calculated as the current exposure without an add-on for PFE, [23](#) calculated as follows:

1. Where a qualifying master netting agreement (MNA) [24](#) is in place, the current exposure (E') is the greater of zero and the total fair value of securities and cash that the institution has lent, sold subject to repurchase or provided as collateral to the counterparty for all transactions included in the qualifying MNA ( $\sum E_i$ ), less the total fair value of securities and cash that the institution has borrowed, purchased subject to resale or received as collateral from the counterparty for those transactions ( $\sum C_i$ ). This is illustrated in the following formula:

$$E' = \max \left( 0, \sum E_i - \sum C_i \right)$$

2. Where no qualifying MNA is in place, the current exposure for transactions with a counterparty must be calculated on a transaction by transaction basis: that is, each transaction i is treated as its own netting set, as shown in the following formula:

$$E_i' = \max \left( 0, E_i - C_i \right)$$

3. Ei' may be set to zero if (i) Ei is the cash lent to a counterparty, (ii) this transaction is treated as its own netting set and (iii) the associated cash receivable is not eligible for the netting treatment in paragraph 53(i).

For the purposes of this subparagraph, the term "counterparty" includes not only the counterparty of the bilateral repo transactions but also triparty repo agents that receive collateral in deposit and manage the collateral in the case of triparty repo transactions.

Therefore, securities deposited at triparty repo agents are included in "total value of securities and cash lent to a counterparty" (E) up to the amount effectively lent to the counterparty in a repo transaction. However, excess collateral that has been deposited at triparty agents but that has not been lent out may be excluded. [Basel Framework, LEV 30.37]

## (ii) Qualifying master netting agreement

54. The effects of bilateral netting agreements [25](#) for covering SFTs will be recognised on a counterparty by counterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of whether the counterparty is insolvent or bankrupt. In addition, netting agreements must:

1. provide the non-defaulting party with the right to terminate and close out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
2. provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;
3. allow for the prompt liquidation or set-off of collateral upon the event of default; and
4. be together with the rights arising from provisions required in (a) and (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty's insolvency or bankruptcy.

[Basel Framework, LEV 30.38]

55. Netting across positions held in the banking book and trading book will only be recognized when the netted transactions fulfil the following conditions:

1. all transactions are marked to market daily; and
2. the collateral instruments used in the transactions are recognized as eligible financial collateral in the banking book.

[Basel Framework, LEV 30.39]

### (iii) Sale accounting transactions

56. Leverage may remain with the lender of the security in an SFT whether or not sale accounting is achieved under the operative accounting framework (e.g., IFRS). As such, where sale accounting is achieved for an SFT under the institution's operative accounting framework, the institution must reverse all sales-related accounting entries, and then calculate its exposure as if the SFT had been treated as a financing transaction under the operative accounting framework (i.e., the institution must include the sum of amounts in subparagraphs (i) and (ii) of paragraph 53 for such an SFT) for the purposes of determining its leverage ratio exposure measure. [Basel Framework, LEV 30.40]

### (iv) Institution acting as an agent providing an indemnity for credit risk

57. An institution acting as agent in an SFT generally provides an indemnity or guarantee to only one of the two parties involved, and only for the difference between the value of the security or cash its customer has lent and the value of collateral the borrower has provided. In this situation, the institution is exposed to the counterparty of its customer for the difference in values rather than to the full exposure to the underlying security or cash of the transaction (as is the case where the institution is one of the principals in the transaction). Where the institution does not own/control the underlying cash or security resource, that resource cannot be leveraged by the institution. [Basel Framework, LEV 30.41]

58. Where an institution acting as agent in an SFT provides an indemnity or guarantee to a customer or counterparty for any difference between the value of the security or cash the customer has lent and the value

of collateral the borrower has provided and the institution does not own or control the underlying cash or security resource, then the institution will be required to calculate its exposure measure by applying only subparagraph (ii) of paragraph 53. [26](#) [Basel Framework, LEV 30.42]

59. An institution acting as agent in an SFT and providing an indemnity or guarantee to a customer or counterparty will be considered eligible for the exceptional treatment set out in paragraph 58 *only* if the institution's exposure to the transaction is limited to the guaranteed difference between the value of the security or cash its customer has lent and the value of the collateral the borrower has provided. In situations where the institution is further economically exposed (i.e., beyond the guarantee for the difference) to the underlying security or cash in the transaction [27](#) , a further exposure equal to the full amount of the security or cash must be included in the exposure measure. [Basel Framework, LEV 30.43]
60. Where an institution acting as agent provides an indemnity or guarantee to both parties involved in an SFT (i.e., securities lender and securities borrower), the institution will be required to calculate its leverage ratio exposure measure in accordance with paragraphs 57 to 59 separately for each party involved in the transaction. [Basel Framework, LEV 30.44]

#### (d) Off balance sheet exposures

61. For the purpose of the leverage ratio, off balance sheet (OBS) items will be converted into credit exposure equivalents by applying credit conversion factors (CCFs) to the notional amount of the exposure. The amount after applying the applicable CCF will be included in the exposure measure. [Basel Framework, LEV 30.46]
62. OBS items include commitments (including liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit. If the OBS item is treated as a derivative exposure per the institution's relevant accounting standard, then the item must be measured as a derivative exposure for the purpose of the leverage ratio exposure measure. In this case, the institution does not need to apply the OBS item treatment to the exposure. Institutions should refer to section 4.1.18 of the CAR Guideline for a more detailed description of OBS items. [Basel Framework, LEV 30.45]

63. In addition, specific and general provisions set aside against OBS exposures that have decreased Tier 1 capital may be deducted from the credit exposure equivalent amount of those exposures (i.e., the exposure amount after the application of the relevant CCF). However, the resulting total off-balance sheet equivalent amount for OBS exposures cannot be less than zero. [Basel Framework, LEV 30.48]
64. Commitments that are unconditionally cancellable at any time by the institution without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness, will receive a 10% CCF. This excludes exposures captured in paragraph 72 below. Retail commitments are considered unconditionally cancellable if the terms permit the institution to cancel them to the full extent allowable under consumer protection and related legislation. [Basel Framework, LEV 30.54]
65. Direct credit substitutes, e.g., general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptances (including endorsements with the character of acceptances) will receive a CCF of 100%. [Basel Framework, LEV 30.49]
66. Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain drawdown, will receive a CCF of 100%. [Basel Framework, LEV 30.49]
67. Exposure amounts associated with unsettled financial asset purchases (i.e., the commitment to pay) where regular-way unsettled trades are accounted for at settlement date will receive a CCF of 100%. Institutions may offset commitments to pay for unsettled purchases and cash to be received for unsettled sales provided that the following conditions are met: (i) the financial assets bought and sold that are associated with cash payables and receivables are fair valued through income and included in the institution's regulatory trading book as specified in section 9.2 in Chapter 9 of the CAR Guideline; and (ii) the transactions of the financial assets are settled on a DVP basis. [Basel Framework, LEV 30.49]
68. Certain transaction-related contingent items (e.g., performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) will receive a CCF of 50%. [Basel Framework, LEV 30.51]
69. Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) will receive a CCF of 50%. [Basel Framework, LEV 30.50]

70. For short-term self-liquidating trade letters of credit arising from the movement of goods (e.g., documentary credits collateralised by the underlying shipment), a 20% CCF will be applied to both the issuing and confirming institutions. [Basel Framework, LEV 30.53]
71. Commitments, regardless of the maturity of the underlying facility, will receive a CCF of 40%, unless they qualify for a lower CCF. [Basel Framework, LEV 30.52]
72. Undrawn balances of credit card and charge card exposures will receive a CCF of 25%.
73. Where there is an undertaking to provide a commitment on an OBS item, institutions are to apply the lower of the two applicable CCFs. [Basel Framework, LEV 30.55]
74. All off-balance sheet securitisation exposures must be treated as set out in section 6.5.1.1 of Chapter 6 of the CAR Guideline, including with respect to the treatment of overlapping exposures. [Basel Framework, LEV 30.56]
75. Off-balance sheet items that are credit substitutes not explicitly included in any other category will receive a CCF of 100%. [Basel Framework, LEV 30.49]



## Footnotes

- 1 The capital and leverage requirements for domestic systemically important banks are supplemented by the requirements described in OSFI's Total Loss Absorbing Capacity (TLAC) Guideline.
- 2 [https://www.bis.org/basel\\_framework/index.htm](https://www.bis.org/basel_framework/index.htm)
- 3 Following the format: [Basel Framework, XXX yy.zz].
- 4 This includes "institutions" that are subsidiaries of other Federally Regulated Financial Institutions (FRFIs). Foreign bank branches are not subject to this guideline.
- 5 [SMSB Capital and Liquidity Guideline](#).
- 6 [Supervisory Information \(Banks\) Regulations, Supervisory Information \(Trust and Loan Companies\) Regulations](#).
- 7 Refer to the [Guide to Intervention for Federally Regulated Deposit-Taking Institutions](#).
- 8 Managing Director, Approvals, Regulatory Affairs Division, [approvals-approbations@osfi-bsif.gc.ca](mailto:approvals-approbations@osfi-bsif.gc.ca).
- 9 Although paragraph 41 of Chapter 2 in the CAR Guideline specifies the treatment of general provisions/general loan-loss reserves for banks using the standardised approach for credit risk, for the purposes of the leverage ratio exposure measure the definition of general provisions/general loan-loss reserves specified in section 2.1.3.7 of Chapter 2 in the CAR Guideline applies to all institutions regardless of whether they use the standardised approach or the internal ratings-based (IRB) approach for credit risk for their risk-based capital calculations.
- 10 For the purposes of this treatment, "regular-way purchases or sales" are purchases or sales of financial assets under contracts for which the terms require delivery of the assets within the timeframe established generally by regulation or convention in the marketplace concerned.

- 11** If under an institution's national accounting standards, there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, the institution must use the sum of the positive fair values of these derivatives as the replacement cost.
- 12** For purposes of this paragraph, the terms "clearing member", "trade exposure", "central counterparty" and "qualifying central counterparty" are defined as in section 7.1 of the CAR Guideline. In addition, for the purposes of this paragraph, the term "trade exposures" includes initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CCP.
- 13** Where an institution acts as a clearing member and does not guarantee the CCP's performance to the client, the institution may exclude from the exposure measure the effective notional principal amount of credit protection sold through a credit derivative contract that it clears on behalf of a clearing member client.
- 14** A multi-level client structure is one in which institutions can centrally clear as indirect clients; that is, when clearing services are provided to the institution by another institution which is not a direct clearing member, but is itself a client of a clearing member or another clearing client. The term "higher level client" refers to the institution that provides clearing services.
- 15** That is, upon the insolvency of the clearing member, there is no legal impediment (other than the need to obtain a court order to which the client is entitled) to the transfer of the collateral belonging to clients of a defaulting clearing member to the QCCP, to one or more other surviving clearing members or to the client or the client's nominee.
- 16** If there is clear precedent for transactions being ported at a QCCP and industry intent for this practice to continue, then these factors must be considered when assessing if trades are highly likely to be ported. The fact that QCCP documentation does not prohibit client trades from being ported is not sufficient to say they are highly likely to be ported. [Basel Framework, LEV 30.26]

For example, the application of the same material terms condition would result in the following treatments:

- In the case of single name credit derivatives, the credit protection purchased through credit derivatives is on a reference obligation which ranks *pari passu* with or is junior to the underlying reference obligation of the written credit derivative. Credit protection purchased through credit derivatives that references a subordinated position may offset written credit derivatives on a more senior position of the same reference

- 17 entity as long as a credit event on the senior reference asset would result in a credit event on the subordinated reference asset;
- For tranching products, the credit protection purchased through credit derivatives must be on a reference obligation with the same level of seniority.
- 18 Specifically, the credit quality of the counterparty must not be positively correlated with the value of the reference obligation (i.e. the credit quality of the counterparty falls when the value of the reference obligation falls and the value of the purchased credit derivative increases). In making this determination, there does not need to exist a legal connection between the counterparty and the underlying reference entity.
- 19 For SFT assets subject to novation and cleared through QCCPs, “gross SFT assets recognised for accounting purposes” are replaced by the final contractual exposure (i.e., the exposure to the QCCP after the process of novation has been applied), given that pre-existing contracts have been replaced by new legal obligations through the novation process. However, institutions can only net cash receivables and cash payables with a QCCP if the criteria in paragraph 53 (i) are met. Any other netting permitted by the QCCP is not permitted for the purposes of the leverage ratio.
- 20 Gross SFT assets recognised for accounting purposes must not recognise any accounting netting of cash payables against cash receivables (e.g., as currently permitted under IFRS). This regulatory treatment has the benefit of avoiding inconsistencies from netting which may arise across different accounting regimes.
- 21 Open maturity secured financing transactions can be treated as overnight maturity provided the institution can demonstrate to OSFI: i) that it can contractually and operationally collapse an open maturity trade on the next business day without incurring legal or reputational risk; and ii) that the trades are priced similarly to overnight trades.
- 22 This criterion is not intended to preclude a Delivery-versus-Payment (DvP) settlement mechanism or other type of settlement mechanism, provided that the settlement mechanism meets the functional requirements as set out in this paragraph. For example, a settlement mechanism may meet these functional requirements if any failed transactions (i.e., the securities that failed to transfer and the related cash receivable or payable) can be re-entered in the settlement mechanism until they are settled.

The determination of PFE for SFTs under paragraph 252 in Chapter 4 of the CAR Guideline (applicable to those executed under MNAs) and footnote 84 of that chapter (which is applicable to those transactions not executed under MNAs) requires the institution to apply haircuts to the value of securities and for foreign

- 23 exchange risk. Since counterparty risk for SFTs for leverage ratio purposes is determined solely by the current exposure portion of the formulas in those paragraphs, no haircuts are needed in the calculation.
- 24 A “qualifying” MNA is one that meets the requirements under paragraphs 54 and 55 below.
- 25 The provisions related to qualifying master netting agreements (MNAs) for SFTs are intended for the calculation of the counterparty add-on of the exposure measure of SFTs as set out in paragraph 53(ii) only.
- 26 Where, in addition to the conditions in paragraphs 57 to 59, an institution acting as an agent in an SFT does not provide an indemnity or guarantee to any of the involved parties, the institution is not exposed to the SFT and therefore need not recognise those SFTs in its leverage ratio exposure measure.
- 27 For example, due to the institution managing collateral received in the institution’s name or on its own account rather than on the customer’s or borrower’s account (e.g., by on-lending or managing unsegregated collateral, cash or securities). However, this does not apply to client omnibus accounts that are used by the agent to hold and manage client collateral provided that client collateral is segregated from the institution’s proprietary assets and the institution calculates the exposure on a client-by-client basis.